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ABSTRACT

Some 50 titles have been selected, abstracted, and categorized for this bibliography. They have also been divided into five educational subject areas: general topics; public school/early childhood; community/junior college; college/university; and adult education. The bibliography was designed specifically for learning lab coordinators, librarians, and media specialists. The listings are recent, no entry being more than two years old. The information contained ranges from instructional satellite systems and computer-assisted instruction guides to catalog systems for non-print materials and model programs for elementary schools. (MC)

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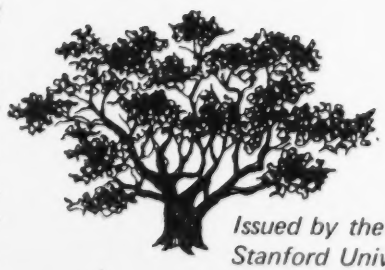
The Best of ERIC:

LEARNING RESOURCE CENTERS

By Mayrelee Newman

March 1973



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FOREWORD

This "Best of ERIC" collection on Learning Resource Centers has been prepared in conjunction with the Third Annual National Educational Technology Conference, March 18-22, 1973, in New York City.

Including the most recent and relevant material on learning centers, this bibliography was designed specifically for learning lab coordinators, librarians and media specialists, educators and training staffs, faculty, and others interested in this field.

Documents listed here have been selected from the entire ERIC (Educational Resources Information Center) collection, and not just from those processed at the Stanford Clearinghouse on Media and Technology.

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In the case of documents not available from ERIC, ordering information is included, where possible.

I. GENERAL

An Instructional Satellite System for the United States: Preliminary Considerations. ED 055 428.

James R. DuMolin and Robert P. Morgan. Washington University, St. Louis, Missouri, 1971, 47 pages. EDRS price microfiche 65c, hardcopy $3.29.

Based on educational, social, political, and other considerations, an instructional satellite system, AVSIN (Audio-Visual Satellite Instruction), is hypothesized which represents one possible organizational and administrative arrangement for delivering large amounts of quality software to schools and learning centers. The AVSIN system is conceived of as a cooperative public-private sector effort in which a non-profit instructional satellite corporation controls the satellite, but in which software is made available to schools on a competitive basis. Using AVSIN as a point of departure, other alternative organizational schemes and the possible future role of existing organizations involved in public and instructional television are discussed. An appendix contains an assessment of long-range social and political implications which a large-scale instructional satellite system may have for United States education. Particular attention is given to requirements for providing equality of educational opportunity.

Programmed Learning: A Bibliography of Programs and Presentation Devices. Fourth Edition with Supplements Including the 1971 Release.

Carl H. Hendershot. Hendershot Programmed Learning Consultants, 4114 Ridgewood Drive, Bay City, Michigan 48706, 1971, 749 pages, $27 (two volumes).

Over 3,500 commercial programs for use in programed instruction are listed by subject and publisher. For each title or series, the following information is provided: approximate length in hours, approximate length in frames or pages, appropriate level for use, list price, and "other information," which often includes a description of the contents. The 55 subject areas include the liberal arts; technical, vocational, and professional training; and miscellaneous topics like bridge, chess, and boating. In addition, devices for use in the presentation of programs, multimedia instruction kits, and educational systems are listed by manufacturer.

Preparing and Using Individualized Learning Packages for Ungraded, Continuous Progress Education

Philip G. Kapfer and Glen F. Ovard, Educational Technology Publications, 140 Sylvan Avenue, Englewood Cliffs, New Jersey 07632, 1971, 264 pages, $8.95.

An Individualized Learning Package (ILP) is a method for translating traditional curriculum guides and teacher lesson plans into an individualized set of student lesson plans which permit each student to progress continually through the curriculum at his own optimum rate. An ILP offers alternative ways of achieving stated behavioral objectives and allows students to help plan their own learning strategies. The teacher using an ILP becomes less of a lecturer and more of a guide and manager for a total environment for learning. A typical ILP consists of a concept statement for the entire ILP, a list of the sub-concept statements, a list of learning objectives, instructions concerning a pretest which covers all the learning objectives, one or more lessons into which the sub-concepts or learning objectives may be divided, instructions concerning a posttest which covers all the learning objectives, and suggestions for pursuing the subject presented in the ILP in greater breadth or depth. This guide

contains an instructional program intended to teach teachers to construct their own ILPs. It presents its materials in the form of nine ILPs, and is constructed so that it may be used as a textbook in a course or as a self-teaching tool.

Media for Discovery.

Hans Moller. Visual Education Centre, 95 Berkeley Street, Toronto 2a, Ontario, Canada, 1970, 144 pages, $3.97.

Although education journals contain article after article about the wonders that computers, color television, and other elaborate hardware will bring to the classroom, many teachers do not yet have access to these things and must make do with the "humble" media: pictures, filmstrips (both silent and sound), slides, films, and overhead projected material. In fact the potential of even these media has not been fully developed. Each medium has specific learning effects. For example, sound filmstrips structure what is seen more than silent ones do. Teachers who understand both the potential and limitations of these media can facilitate the prime aim of education today: Understanding, rather than acquisition of data; insight, rather than inventory of facts; and intelligent guesses rather than pat answers. Prime requirements for putting the media to work are flexibility of approach and an open, pleasant learning environment: Multi-media kits should be selected that really do contain material from several media.

Places and Things for Experimental Schools. ED 060 560.

Laurence Molloy and others. Educational Facilities Labs, Inc., 477 Madison Avenue, New York, New York 10022, 1972, 268 pages, $2. EDRS price microfiche 65c, hardcopy $9.87.

The information available on current developments in the planning and use of educational facilities is dispersed among many resources. This publication gathers up the scattered information on all the lively facilities topics and complements it with the names and addresses of prime information sources for interested public officials, planners, educators, students, and citizens. The document is intended to give access to the latest developments in educational facilities and their relationship to educational experimentation.

Primer for Media Resources Librarians. ED 061 984.

National Medical Audiovisual Center of the National Library of Medicine, Atlanta, Georgia, 1972, 21 pages. EDRS price microfiche 65c, hardcopy $3.29.

Basic instructions (suggestions) are provided to help the initiate establish a resource center. The primer begins with some considerations in organizing a media resource collection which includes a brief discussion of the three basic types of media resource programs: reference only, limited acquisition, and permanent collections. This is followed by a brief examination of the factors upon which the type and scope of the program are dependent, including: need/interest, materials on hand, equipment on hand, availability of materials, budget, space, and staff. The instructions end with suggestions for locating materials and for cataloging and indexing the materials. Although this is specifically written for a medical resource center, the general suggestions could be applied to other types of film libraries.

Standards for Cataloging Nonprint Materials. Revised Edition.

William J. Quinly and others. National Education Association, Publication Sales Section, 1201 Sixteenth Street N.W., Washington, D.C. 20036, Stock No. 071-02898, 1971, 56 pages, $3.50.

Rules and procedures for cataloging non-print media are provided in this manual. The first section on cataloging rules covers all elements which should appear on the catalog card. After some comments on entries, the arrangement of catalog elements, and style, the elements of the description of an item are discussed. The application of the cataloging principles provided in the first section is illustrated in the second section. Full descriptive cataloging appears on sample cards for all types of specific media.

Bibliography of Programmed Instruction and Computer Assisted Instruction.

Taher A. Razik, editor. Educational Technology Publications, 140 Sylvan Avenue, Englewood Cliffs, New Jersey 17632, 1971, 264 pages, $7.95.

Published, as well as selected unpublished, articles dealing with programed instruction and computer-assisted instruction are cited in this bibliography. The articles are drawn from *Education Index, Psychological Abstracts,* Educational Resources Information Center (ERIC), *Dissertation Abstracts,* and 58 journals in the fields of psychology, education, and instructional technology from the years 1954 through 1969. The texts of all articles were examined to determine whether the article met established criteria of relevance. Subheadings classify the articles by subject. Within each subheading the articles are listed alphabetically by author or title. The computer-assisted instruction articles are listed separately without headings. Each entry provides the name of the author, title of the article, source, and date of publication.

Analysis and Approach to the Development of an Advanced Multimedia Instructional System. Volume II. Appendix III. Media Cost Data. Final Report.

William E. Rhode and others. Westinghouse Learning Corporation, Bladensburg, Maryland, 1970, 293 pages. Available from the National Technical Information Service, Springfield, Virginia 22151 as document no. AD 715 330, 95c in microfiche or $3 in hardcopy. See also Volume I, AD 715 329.

Basic cost estimates for selected instructional media are tabled in this document. Learning materials production costs are given for motion pictures, still visuals, videotapes,

live television production, linear programed instruction, programed instruction with branching, and audio tapes. Costing guidelines are given for portable instructor aids, closed-circuit television, videotape recording (VTR) system, student response systems, learning laboratories, programed instruction texts, teaching machines, lecture-centered audiovisual devices, and conventional lecture-text instructional system.

Museums and Media: A Basic Reference Shelf. Museums and Media: A Status Report. ED 044 935.

Philip C. Ritterbush and Richard Grove. The ERIC Clearinghouse on Media and Technology, Stanford University, Stanford, California 94305, 1970, 16 pages. Status Report is support paper for "To Improve Learning: A Report to the President and the Congress of the United States by the Commission on Instructional Technology." EDRS price microfiche 65c, hardcopy $3.29. Limited number available from the Clearinghouse free of charge.

A status report on museums and media prefaces the annotated references listed in this paper. Futuristic proposals have been made for a Museum of Media that would be all media and no objects, and for a museum environment individualized by computer and visual previews of the galleries. The museums of today use films, slide-tapes, sound recordings, and electronic guide systems. Plans are being made for a Museum Computer Network. The important role that museums play in elementary and secondary education is represented in the references to books, papers, periodicals, and reports.

Educational Media Selection Centers. Identification and Analysis of Current Practices.

John Rowell and M. Ann Heidbreder. American Library Association, 50 East Huron Street, Chicago, Illinois 60611, 1971, 177 pages, $4.50.

Phase I of this National Book Committee study surveyed existing educational media selection facilities and examined programs at the state, regional, and local levels. Facilities were located and identified, and their successful components were evaluated by means of questionnaires and on-site visits. This final report contains an introductory section which summarizes the initial study and describes the needs which prompted it, the role of the National Book Committee, the purpose of Phase I, and the educational media selection centers program itself. The major findings are presented in more than 80 comprehensive tables, together with conclusions and recommendations for subsequent phases of the program. The conclusions cite the need for better communication programs, for more adequate financial bases, and for less duplication of effort among the centers, especially in the area of evaluating and selecting media. Some of the areas indicated for further study include budget, content and balance of media collections, handling of purchased and free media in centers, display and/or cataloging of material, and evaluation of audiovisual and print media.

The Application of Programmed Learning and Teaching Systems Procedures for Instruction in a Museum Environment. Final Report. ED 048 745.

C. G. Screven, Wisconsin University, Milwaukee, 1967, 96 pages. EDRS price microfiche 65c, hardcopy $3.29.

Visitors to a public museum were asked to study a museum exhibit and to answer programed questions using a punchboard coordinated with an audio cassette. The audio portion pointed out relationships in the exhibit and directed a visitor's attention, as well as confirmed his answers to the punchboard questions. Some visitors used the audio cassette alone, and some just viewed the exhibit. The effectiveness of these devices was evaluated by means of pre- and post-tests given on a gamelike test machine. One unexpected result was that while the cassette punchboard system improved learning, so did simply taking a pretest before viewing the exhibit. This result led to the development and pilot testing of a "recycling" system which uses a gamelike, self-quiz machine that provides criterion questions to help the player identify the concepts to be learned, scores his performance, and gives a free-play token for a good performance. The positive results gained from the use of these interactive devices supports the idea that substantive learning can occur in a public museum. Results also suggest several possibilities for using programed, interactive systems to evaluate and to improve the learning potential of museum exhibits and other public displays.

Learning Laboratories: A Guide to Adoption and Use.

William G. Teachey and Joseph B. Carter. Educational Technology Publications, 140 Sylvan Avenue, Englewood Cliffs, New Jersey 07632, 1971, 94 pages, $3.95.

After outlining the advantages of individualizing instruction through the use of learning laboratories, this book describes the physical facilities needed in a laboratory and stresses the crucial role of the laboratory coordinator, who must be a counselor, test administrator, tutor or teacher, supervisor, bookkeeper, and curriculum specialist. A check list for analyzing coordinator performance is included. The fundamental importance of testing to a laboratory program is stressed, and the objectives, basic terminology, and procedures for a successful testing program are explained. An example is given of a successful learning laboratory in North Carolina. The need to constantly evaluate the laboratory program is considered, as well as methods for evaluating programed instructional materials. A list of recommended self-instructional equipment and the names and addresses of principal equipment and materials vendors in the United States are provided.

To Improve Learning: An Evaluation of Instructional Technology. Volume I. Part One; A Report by the Commission on Instructional Technology. Part Two; Instructional Technology; Selected Working Papers on "The State of the Art."

Sidney G. Tickton, editor. R. R. Bowker Company, 1180 Avenue of the Americas, New York, New York 10036, 1970, 441 pages, $13.95.

Brief communications on learning and instructional technology from various persons in the fields of education, communications, and government are brought together in the report by the Commission on Instructional Technology. Following these contributions, the Committee makes six recommendations. Two of these are that two new institutions be established: the National Institutes of Education (NIE) and the National Institute of Instructional Technology (NIIT). Appendices have contributions from educators, media representatives, and others gathered under headings concerned with technology's lack of impact on education, its cost and costing, and its use with the poor and the handicapped. Part Two of this volume is composed of 22 selected working papers dealing with the state of the art in instructional television, computer-assisted instruction, simulation and games, films, programed instruction, radio, dial access information retrieval systems, adaptive machine aids, videotapes, and the interface of education and information science.

Invitation to Learning: The Learning Center Handbook.

Ralph Claude Voight. Acropolis Books Ltd., Colortone Building, 2400 17th Street N.W., Washington, D.C. 20009, 1971, 150 pages, $4.95.

The learning center approach to implementing individualized instruction in the traditional classroom is described. Three basic types of learning centers are identified; an inventory center might be located at a table or at four-to-six carrel-like structures where each child is evaluated periodically through the use of teacher-made or standardized instruments; an academic learning center might be a table with various activities designed to permit each child to experience personal involvement in the usual school subjects; a developmental center would group together material and activities which emphasize process, rather than content. The author discusses many variations of these three basic centers and offers practical hints and tips to help get the learning center approach started in a classroom. The text is planned so that it can be used by an individual teacher in a self-contained classroom or by a team of teachers utilizing the resources of several rooms, and so that the approach may be introduced gradually or all at once.

Libraries & Study Facilities. A Selected Bibliography. ED 041 377.

Wisconsin University, The ERIC Clearinghouse on Educational Facilities (now the ERIC Clearinghouse on Educational Administration Management at University of Oregon, Eugene), 1970, 27 pages. EDRS price microfiche 65c, hardcopy $3.29.

This bibliography contains a selected reference list of publications of interest to architects, library planners, and librarians contemplating the planning, programing, and/or design of library facilities. Each reference is followed by a listing of ERIC descriptors that describe its contents. The items are listed in six sections: (1) library planning, (2) carrels and study facilities, (3) library automation and technology, (4) resource and instructional materials centers, (5) building equipment and materials selection, and (6) additional references.

The Open School. Supplement to the Final Report of the Governor's Commission on Education (Kellett Commission). ED 051 569.

Clifford Wood, editor, and others. Governor's Commission on Education, Madison, Wisconsin, 1971, 56 pages. EDRS price microfiche 65c, hardcopy $3.29.

This supplement is intended to present the idea behind and the characteristics of the Open School in detail. The Open School was conceived to meet several important needs in Wisconsin education: (1) to enable more people of all ages to enroll in formal and informal programs of education on a continuing basis; (2) to guide and accelerate the use of mediated instruction, and to provide a Statewide Laboratory for testing and evaluating educational media and technology; and (3) to realize the economies and efficiencies possible through coordinated planning, program development, and Statewide media utilization and access systems. The Open School is characterized by open admissions; open communications (no walls, uses communications media only); open ideas/curricula; open access (homes, jobs, communities); open participation, accreditation, and cooperation; and open staff sharing (between regular and open schools, libraries, public and private schools, business, and industry).

Yellow Pages of Learning Resources.

Richard Saul Wurman, editor. The MIT Press, Massachusetts Institute of Technology, Cambridge, Massachusetts 02142, 1972, 94 pages, $1.95.

This book is based on the premise that the most extensive facility imaginable for learning is our urban environment. The purpose of the book is to stimulate interest in learning from the people of the city, to suggest some of the things which can be learned, and to suggest ways of tapping the city's resources. The topics are in this format: "What can you learn . . . from an accountant, . . . at an airport, . . . about an automobile, . . . from a locksmith, . . . about a telephone?" Under each title, the importance of the occupation, place, or

item is presented, along with suggestions for finding out more and questions which could be asked at each location. Also included are guidelines for using the book and a directory of schools which use environments other than the classroom as a learning resource.

II. PUBLIC SCHOOL/EARLY CHILDHOOD

Center for Individualized Learning. Title III Projects, End of Period Report, October 1, 1966 to August 31, 1968. Final Report. ED 039 629.

Abington School District, Pennsylvania, 1968, 194 pages. EDRS price microfiche 65c, hardcopy not available.

This final report presents the chronology of planning and operating a Title III grant. The following activities in the Abington School District, Abington, Pennsylvania, were financed in part by the Title III grant: (1) inservice training–teachers learned new approaches and techniques for individualizing instruction involving the use of different media; (2) independent study–an existing program was supplemented with additional staff, equipment, and materials; (3) individualized instructional projects–the materials, resources, and personnel to develop many specially designed individualized learning materials were made available; (4) media and technology–the application of media to individualizing learning was achieved through the purchase of additional hardware and the establishment of a media center with trained personnel. Also included are a financial report and an evaluation of the effectiveness of the program and its effect on the school district.

Schools for Early Childhood. Profiles of Significant Schools. ED 046 073.

Paul Abramson. Educational Facilities Laboratories, 477 Madison Avenue, New York, New York 10022, 1970, 56 pages, free. EDRS price microfiche 65c, hardcopy $3.29.

The focus of this publication is on the creation of learning facilities for two-, three-, and four-year-old children. This volume illustrates graphically (1) 11 new centers that were specifically constructed for early education, and (2) old facilities–houses,storefronts, and warehouses–that have been successfully remodeled to provide early education centers. Also described is a nonschool approach to early learning for communities where lack of finances or interest limits the development of early education centers. The structures vary widely in space usage, types of equipment, and genre of teaching aids, differences dictated by considerations of finances or space. Because some facilities designs are the results of decisions concerning the program the school is offering, these program objectives are spelled out.

Model Programs. Childhood Education: Boston Public Schools Learning Laboratories. ED 044 893.

American Institutes for Research, Palo Alto, California, 1970, 21 pages. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 as document no HE 5.?20:20153 for 20c. EDRS price microfiche 65c, hardcopy not available.

Described as one of 34 booklets in a series of promising programs on childhood education, the report presents information on the Boston Public Schools Learning Laboratories. The special approach for slow learners and gifted students in grades two through four is discussed in terms of purpose and structure, population served, specific materials and facilities, financial aspects, and future plans. Additional sources of information on the program are also provided.

Student Library Resource Requirements in Philadelphia; Supplement to Progress Report Covering Phase IV, June 15, 1971-December 14, 1971. ED 060 885.

John Q. Benford. Philadelphia School District, Pennsylvania, 1972, 198 pages. EDRS price microfiche 65c, hardcopy $6.58.

This supplement to the progress report of Phase IV of the Philadelphia Student Library Resources Project contains the following information: (1) Outline of major tasks, (2) Objectives for the demonstration center, (3) Sample program outlines of the center, (4) Evaluation design of the center, (5) Community profile and survey, (6) Community advisory board activities, (7) The facility and (8) Dissemination of information about the center.

Developing Communication Skills in Non-Committed Learners.

J. D. Brogden, Parker Publishing Company, Inc., Village Square Building, West Nyack, New York 10994, 1970, 224 pages, $6.95.

Designed to identify the major problems of the non-committed high school learner and to suggest specific, practical courses of action for the experienced educator, this book emphasizes the positive approach that everyone can improve if given feedback for his responses. Chapters are concerned with (1) identifying ths non-committed learner; (2) the communication skills laboratory approach and steps for developing such

a laboratory; (3) using tests as feedback and placement tools; (4) the importance of planning for innovation in goal achievement; (5) techniques effective in developing learning skills; (6) developing an effective sight-oral-silent perception program; (7) the development of composition, discourse, aural, and work processing perception skills, and (8) basic beliefs about the non-committed program. Appendices provide lists of tests, commercial companies that distribute materials useful to the communications instructor, and educational publishers of both hardback and paperback titles.

Instructional Media Center; An Annotated Bibliography.

Harold S. Davis and David J. Crotta. Educational Research Council of America, Rockefeller Building, Cleveland, Ohio 44113, 1971, 32 pages, $1.20.

A growing concern for individualized instruction has made educators aware that all students need access to a wide range of media outside of the typical classroom or traditional library. For those desiring to develop appropriate facilities to fill this need, this bibliography stresses ideas that will enhance the planning, organization, and operation of a modern instructional media center. Approximately 185 references to books, pamphlets, and articles which were published between 1960 and 1971 comprise the bibliography: entries are arranged alphabetically by author, and each is provided with a brief annotation, the date of publication, and the publisher.

Elementary School Media Programs: An Approach to Individualizing Instruction.

Dorothy Barclay Gilstrap, editor. Publications-Sales Section, National Education Association, 1201 Sixteenth Street N.W., Washington, D.C. 20036, 1970, 32 pages, a Study/Action Publications series, $1.

The purpose of this publication is to introduce readers to the media program concept and to offer practical assistance to those interested in establishing or expanding media programs; typical services of media specialists are enumerated; a sampling is given of requests from teachers; and guidelines are suggested for implementing a media program. Examples are given of current innovative school programs. References for further study and action are appended.

A Bilingual Math-Science Learning Center. ED 051 716.

John R. Jourdane. University of Southern California, Los Angeles, School of Education, 1970, 5 pages (in *Reaching: Creative Approaches to Bilingual/Bicultural Education,* September 1970). EDRS price microfiche 65c, hardcopy $3.29.

The purpose of this study is to determine if children who attend a bilingual math-science center will increase their level of performance to a greater degree than their counterparts on a test of problem solving and scientific thinking. The study tests 86 sixth-grade students in the Cutler Elementary School in the Cutler-Orosi Unified School District, California. The Sequential Test of Educational Progress (STEP): Science 4B, developed by the Educational Testing Service, was administered to the students. Results point out that the experimental group which attended the Center improved considerably more than the control group. The author concludes that a math-science center should be a basic part of every bilingual school.

Criteria for Modern School Media Programs. ED 058 758.

Maryland State Department of Education, Baltimore, 1971, 30 pages. EDRS price microfiche 65c, hardcopy $3.29.

In order to provide guidance to schools and school systems which are developing and improving their media programs, the Maryland State Department of Education has compiled a set of criteria based on the standards of the American Library Association and the National Education Association. The School Media Program in the Maryland State Department of Education, which supports media activities throughout the state is detailed. The services, staff, collections of material and equipment, and facilities recommended for media programs at the school system level and at the level of the individual school are fully described. A chart lists the space needed by a school media center for each of its functions.

Instructional Materials Centers; Annotated Bibliography. ED 057 564.

Rosario Poli, compiler. Association Referral Information Service, Ohio Education Association, 225 East Broad Street, Columbus, Ohio 43215, 1970, 28 pages, single copies free, 2-9 copies 10c. EDRS price microfiche 65c, hardcopy $3.29.

An annotated bibliography lists 74 articles and reports on instructional materials centers (IMC) which appeared from 1967-70. The articles deal with such topics as the purposes of an IMC, guidelines for setting up an IMC, and the relationship of an IMC to technology. Most articles deal with use of an IMC on an elementary or secondary level, but some discuss its use in higher education.

III. COMMUNITY/JUNIOR COLLEGE

Teaching English in the Two-Year College.

Thomas L. Barton and Anna M. Beachner. Cummings Publishing Company, 2727 Sand Hill Road, Menlo Park, California 94025, 1970, 133 pages, $3.95 paperback.

Of special use to departments in four-year colleges and universities which have responsibilities for preparing teachers of English and for developing in-service projects for two-year college personnel, this book details instructional techniques and curricular materials for the community college teacher of English and for those in preparation for such assignments. New teacher-learner roles, unconventional approaches to language learning, and divergent points of view toward traditional course content are topics included. Also provided are materials on evaluation of student progress, descriptions of special facilities such as learning laboratories, descriptions for organizing course content and placing students in appropriate programs, and new ways for involving staff in identifying and meeting varied student needs and interests. In the chapters–spanning such areas as written expression, improvement of reading, and elective offerings, there is both stated and implied identification of the contribution to be made by important supportive personnel (i.e., counselors, librarians, and learning specialists).

The Learning Resource Center: Concepts and Designs. ED 047 697.

Richard Ducote. 1970, 23 pages, Paper presented at the meetings, "The Learning Resource Center of the Two Year College," June-July, 1970, Appalachian State University, Boone, North Carolina. EDRS price microfiche 65c, hardcopy $3.29.

The need to change the conventional library into a learning resource center is stressed. With the learning resources concept, instructors will be more prone to look upon media not with the idea of why it should be used in teaching, but how it can be used in order to do a more effective job of teaching. The effective use of media will necessarily be based on individual student need, and will permit the instructor to become the creative synthesizer of the learning process rather than the regimented dispenser of knowledge. The learning resource concept will more effectively permit the new teaching technique and approaches to reach all of the faculty. The provision of a one-stop total service will tend to create faculty interest and use. The very concept of learning resources will allow a college to take a far more effective management approach toward the use of media in order to insure the most effective use of personnel. The use of learning resources can eliminate the obstructions to the formulation of programs for effective instruction. The profiles of six colleges whose learning resources centers are included in this publication illustrate current practice.

A Directory of Self-Instructional Materials Used in the Junior College. ED 053 720.

ERIC Clearinghouse for Junior Colleges, 96 Powell Library, University of California, Los Angeles 90024, limited supply available free of charge, 1971, 141 pages. EDRS price microfiche 65c, hardcopy $6.58.

This directory is a compilation, by subject matter, of self-instructional materials prepared by instructors who are specialists in each field. Where possible, the listings include the author/instructor, the institution, the target population or specific course name, the package's availability, and its number and title.

A Multimedia Survey of the Community College Libraries of the State of Illinois. ED 047 722.

Illinois Library Association. Chicago, 1970, 159 pages. EDRS price microfiche 65c, hardcopy $6.58.

This survey is a first attempt to ascertain the existing and planned roles of the community college learning resource centers in meeting the total educational communication and service needs of the community college. It is the purpose of this survey to examine existing and planned library services. A committee analyzed each aspect of community college libraries–philosophy, staff, budget, collection, facilities, systems and services. Realizing that each aspect affects every other aspect, the committee has formulated specific recommendations that if implemented would further develop the total library program of community colleges of the state. This is the first step in a plan to help clarify the steps for achieving the total implementation of the learning resource center philosophy.

An Experimental Learning Resources Center and a New Curriculum in the Social Sciences. ED 056 682.

David Leeb. 1971, 14 pages, EDRS price microfiche 65c, hardcopy $3.29.

At Mercer County Community College (New Jersey) an experimental learning resources center and a new curriculum in the social sciences were developed having primary objectives of: (1) keeping more minority-group students in school, (2) reducing their withdrawal rate, (3) developing assessment techniques accommodating inner-city populations, (4) developing relevant, purposeful curricula for center-city students, (5) improving minority-students instruction, and (6) initially targeting four tasks that would develop or identify: (a) model remediation programs for high-risk students, (b) curricula and teaching techniques for use with minority-poverty students, (c) new experimental programs designed to change and improve educational patterns for minority-poverty students, and (d) research necessary for the effective evaluation of the experimental programs. The particular approach advocated for the experimental instructional system was based

on the following: (1) students' egos must be involved in their work to be successful, (2) multiple instructional methods are the most successful, (3) instruction must center on contemporary issues, (4) basic information must be presented, (5) irrelevance must be countered, (6) the model system must be replicable, (7) academic and social aspects should be emphasized, (8) model city neighborhood liaison should be stressed, (9) ghetto problem sensors must be built in, and (10) assessment methods relevant to the students should be used. An outline of the program is included.

The Learning Resource Center of the Two-Year College. ED 051 797.

S. V. Martorana and others. 1970, 33 pages, Selected papers from an Institute for Training in Librarianship, Appalachian State University, Boone, North Carolina, 1969-1970. EDRS price microfiche 65c, hardcopy $3.29.

This collection of papers investigates various aspects of the library as a Learning Resource Center. The first paper focuses on targets for innovation and points to the administrators of Learning Resource Centers as agents for constructive change in their junior colleges. The second paper shows that the library takes on a dynamic teaching function as new instructional materials are incorporated into the traditional library collection; the instructor, librarian, and audiovisualist share the functions of resource directors and teachers. The third article has implications for stimulating faculty to use the facilities of the college's Learning Resource Center. They include encouraging faculty to try new approaches to teaching and to visit other colleges that are doing new and different things. Stumbling blocks and budget considerations are also briefly discussed. The fourth article stresses the need for information to be actively moved by, rather than passively stored in, a Learning Resource Center. The final article deals with the new trend toward self-instruction and the learning facilities developed to service it. The cost, types and use of facilities is discussed with particular attention given to Portable Carrel Kits which consist of carrying case, cassette tape player, and projector.

Community College Reading Center Facilities. ED 051 792.

Loretta M. Newman. The ERIC Clearinghouse for Junior Colleges, California University, and the ERIC Clearinghouse on Reading, Indiana University, Bloomington (Now the ERIC Clearinghouse on Reading and Communication Skills, Urbana, Illinois), 1971, 19 pages. EDRS price microfiche 65c, hardcopy $3.29.

This topical paper on reading center facilities is part of a series on reading programs in junior colleges. A center is described as a facility used by students, individually or in groups, to develop academic skills and learning through the important element of self-teaching. It is recommended that a center include grouping of learning materials, catalogs, location and direction signs, staff, and students. A satisfactory physical environment or atmosphere is stressed. It is felt that an overall learning center should be the core of a campus. The range in equipment, size, location, and use of space for a center is discussed. Information was gathered from visits to centers at various colleges, surveys, and a study of journal and research articles.

IV. COLLEGE/UNIVERSITY

The Effect of the Laboratory on the College Students' Understanding and Knowledge of Physical Science. Final Report. ED 042 609.

Eugene Crawford and DeWayne Backhus. Kansas State Teachers College, Emporia, 1970, 25 pages. EDRS price microfiche 65c, hardcopy $3.29.

This paper presents the procedures, results and conclusions of a study designed to determine whether three different methodological approaches to the laboratory for a general education physical science course would lead to the same behavioral outcomes. Students enrolled in the physical science course were randomized into one of three laboratory treatment groups; a highly structured scheduled lab, an audio-tutorial type free lab, and a loosely structured home lab. Behavioral changes were assessed through instructor-written unit tests and the Test On Understanding Science (TOUS). Data were obtained for 140 students during the first experimental period, and for 195 students during the second experimental period. The results indicated that (1) no significant differences existed among the lab groups in terms of their cognitive knowledge of science, (2) for the first experimental period, no significant differences existed among the groups with respect to their understanding of science as measured by TOUS, (3) for the second experimental period, significant differences existed among the groups on TOUS scores, and (4) the free lab and home lab groups scored significantly higher on TOUS than the scheduled lab groups.

Academic Support Facilities. Higher Education Facilities Planning and Management Manual Four. Revised.

Harold L. Dahnke and others. Publications Unit, National Center for Higher Education Management Systems, WICHE, P.O. Drawer P, Boulder, Colorado 80302, 1971, 74 pages, $7.50.

This manual analyzes procedures for determining needs for academic support facilities (i.e., library, audio/visual, exhibition, and computer facilities). In general, these facilities house programs that have similar objectives and purposes: acquisition, preservation, maintenance, transformation, retrieval, interpretation, and display of recorded knowledge and information.

An Individualized Approach to Music for the Non-Music Major. ED 052 619.

Robert M. Diamond and others. State University of New York, College at Fredonia, 1971, 136 pages, portions of paper presented at the Annual Meeting of the Association for Educational Communications and Technology, Philadelphia, Pennsylvania, March 1971. EDRS price microfiche 65c, hardcopy $6.58.

The entire course of study in the one-semester music appreciation course intended for the non-music major was redesigned, using a systems approach, to meet a series of pre-stated instructional objectives and to be sensitive to the individual differences of students. To permit maximum flexibility and individualization, the course consisted of a series of well defined, self-contained instructional units, grouped homogeneously into modules. The four basic modules, each of approximately three and one-half weeks in length, covered prerequisites, instrumental forms, vocal forms, and current popular music forms. A wide variety of resources, both human and material, were used, including the learning laboratory, a dial access system, text books, tape slide sequences, videotapes, programed texts with audio, audio units, multi-screen presentation, a student manual, student and faculty performers, and media specialists. An evaluation of the course showed that it was well-liked by students, efficient in both student and faculty time and space utilization, and effective in overcoming the differences between students without any musical background and thus with training in music. The phases of course development, testing, and evaluation are described. Selected pages from the student manual, course revisions, and related results are presented.

What Are We Learning About Learning Centers?

Marshall Gunselman. Eagle Media, Inc., Oklahoma Christian College, Oklahoma City, Oklahoma 73111, 1971, 213 pages, $2.

This is a collection of speeches, reports, and discussions from a symposium at Oklahoma Christian College in March, 1971, which concerned the use of learning centers, particularly at the college level. Participants agreed that learning centers are an efficient way of giving large numbers of students personalized instruction and allowing them to proceed at their own pace. Other reports discuss specific aspects of learning centers. Possible ways of evaluating the effect of a learning center, using standardized tests and other measurements, are suggested. Factors to be considered in designing a center, including flexibility and economy, are discussed. Other topics are equipping the center with hardware and software. Although software materials are not yet extensive, sources for obtaining them are indicated. Concerning the cost of this type of instruction, one college's experience showed that simply adding a learning center to traditional instruction did increase costs. But if traditional (and perhaps ineffective) instruction is altered, learning centers can take on a role which lowers cost of instruction. Reports of the operation of nine learning centers supplement the discussion.

Science for the Thousands: The Open University of Great Britain. ED 047 489.

David G. Hawkridge, Open University, Walton, Bletchley, Bucks (England), 1970, 12 pages, paper presented at the Annual Conference of the American Association for the Advancement of Science (Chicago, Illinois, December, 1970). EDRS price microfiche 65c, hardcopy $3.29.

The Open University of Great Britain, using a multimedia, mass media approach offers instruction leading to a university degree. Its Faculty of Science provides instruction in the disciplines of biology, physics, chemistry, and earth science. The philosophy of instruction is anti-specialization, pro-integration; the social impact of science and technology and the social responsibilities of scientists are emphasized. Very soon, 7,000 students will begin the first undergraduate science course to be given, studying in their own homes. They will receive correspondence packages, containing basic course materials; they will have part-time class tutors available to them; they will have access to study centres where they can meet counselors and where they can use the audio-visual facilities—television, radio, film projectors, tape players, record players, and computer terminals.

What A Learning Resource Center (LRC) Could Mean for Georgetown University. ED 055 417.

Diane D. Henderson and others. Georgetown University, Washington, D.C.; Mitre Corporation, McLean, Virginia, 1971, 29 pages. EDRS price microfiche 65c, hardcopy $3.29.

This paper defines the scope of activities of the joint Georgetown University-MITRE Corporation planning group to design a learning resource center (LRC) for Georgetown. The functions of an LRC are described. It was intended to elicit comments from the faculty at Georgetown. Questions for each department to discuss, concerning its goals and how those goals could be furthered by an LRC, are raised. Appendixes give a history of the MITRE-Georgetown agreement and some scenarios of the activities of the LRC.

The College Resource Centre. Colleges of Applied Arts and Technology. ED 061 599.

School Planning and Building Research Section, Ontario Department of Education, 14th Floor, Mowat Block, Queen's Park, Toronto 182, Ontario (Canada), 1971, 42 pages, $2. EDRS price microfiche 65c, hardcopy not available.

This booklet provides general guidelines for those involved in planning a resource center for the Colleges of Applied Arts and Technology, CAAT. The first section of the document concerns the formation of a resource center building committee and a broad outline of the various considerations to be included in planning the center program. The second section contains a brief summary of CAAT educational philosophy and a discussion of the resource center as part of an information network and as it relates to (1) the community, (2) regional libraries, (3) local industry, and (4) the College Bibliocentre. The third section concerns standards for determining quantities and sizes of collections of print and nonprint materials. The fourth section describes and illustrates different items of equipment necessary for the storage and use of the varied center materials. The fifth section discusses planning determinants for centralized vs. decentralized organization of the resource center, expansion limitations to be avoided, and the physical determinants of the center. The document includes photographs, illustrations, and charts.

V. ADULT EDUCATION

Special Techniques That Work in Teaching the Culturally Deprived.

Arthur W. Burrichter and Curtis Ulmer, editors. Prentice Hall, Englewood Cliffs, New Jersey, 1972, 40 pages.

Adult Learning Laboratories in Adult Basic Education. For Use With Out of School Youth and Adults in Continuing Education Classes. ED 040 366.

Cincinnati Public Schools, Ohio, 1970, 100 pages. EDRS price microfiche 65c, hardcopy $3.29.

Supported by a grant under Title III of the Elementary and Secondary Education Act, a field project was developed to compare achievement at three levels of instruction (grades 0-3, 4-6, 7-8) in an adult learning laboratory and a sample of traditional Adult Basic Education (ABE) classes during 1968-69. Classes, stressing prevocational readiness and personal growth, had similar class hours, numbers of students, and a representative sample of out of school youth and adults in the Cincinnati Public Schools ABE Program. The classes, which focused on learning skills rather than content, offered 100 hours of instruction in language arts, arithmetic, and general education based largely on printed materials. The learning laboratory provided for independent study and individualized instruction through a variety of programed and self-instructional materials as well as audiovisual aids. Much study was accomplished at home in leisure hours. Two major findings were that average gains in test scores showed educational needs being served by both approaches; but that level three gains, being somewhat lower than anticipated, indicate a need for more of both traditional and programed materials. (The document includes 15 tables, cooperating agencies and projects, tests, evaluation procedures, adult centers, methods and materials, equipment, and a list of publishers.)

Guidelines for Establishing and Operating an Adult Learning Laboratory. ED 052 436.

Cleve W. Lane and Robert B. Lewis. North Carolina State University, Raleigh, School of Education, 1971, 158 pages. EDRS price microfiche 65c, hardcopy $6.58.

Presented in this volume are the results of the efforts of the staff of the Adult Learning Center of North Carolina State University to develop and validate a new concept in adult education. Intended to assist planners, teachers, graduate students and others who are faced with the task of applying educational solutions to problems of human learning, it will hopefully serve as a guideline for the organization and the deployment of functions, personnel, equipment, and methodology. Suggested resources and evaluation criteria are also presented.

ABE Learning Center Guidelines. ED 051 501.

New Jersey State Department of Education, Camden, Camden Adult Basic Education Learning Center, 1969, 90 pages. EDRS price microfiche 65c, hardcopy $3.29.

The primary purpose of the ABE Learning Center is to provide services to adults in the Camden area who are in need of basic education. Guidelines for operating the learning center are presented in the following chapters: The Administrator of Learning Centers; The Counseling Office; The Learning Laboratory; The Learning Center Instruction; Pre-Service and In-Service Training; Supplementary Services; Recruitment; Operational Procedures; and Bulletins.

Learning Laboratories for Unemployed, Out-Of-School Youth. ED 047 273.

New York State Education Department, Albany, Bureau of Continuing Education Curriculum Services, 1970, 324 pages. EDRS price microfiche 65c, hardcopy $13.16.

Based on an innovative learning laboratory approach, the five curriculums contained herein are designed to develop the basic skills and positive attitudes of out of school youth and thereby increase their chances for employment while motivating them toward further education and vocational training. First, a plan for program administration is mapped out: program goals, student selection and recruitment, daily operational scheduling, supplemental programs and services, organizational structure, staff selection and orientation, basic instructional methods and goals. The next two sections cover skills in writing, reading, speaking, and listening, and budgeting and general mathematics. Smoking, narcotics, safety, venereal diseases, mental health, environmental pollution, and other health education topics are also presented, followed by an extensive section on occupational orientation (job seeking, interviews, vocational training, equal employment, on the job behavior, and so on). Numerous aspects of social and personal development appear in the fifth curriculum. Audiovisual aids, and suggested instructional materials are also covered, as well as techniques for using community resources and organizing student activities.

Functions of the New York State Learning Laboratories. ED 052 468.

New York State Education Department. Albany, Bureau of Basic Continuing Education, 1971, 121 pages. EDRS price microfiche 65c, hardcopy $6.58.

The descriptions that are contained in this document were prepared by the New York State learning laboratory specialists and show the diverse patterns of operation. Thirteen centers are included.

Workshop in Adult Basic Education (Columbus, Ohio, June 23-July 10, 1970). ED 044 593.

John Ohliger and Lori Ohliger, editors. Ohio State Department of Education, Columbus, Ohio State University, Center for Adult Education, 1970, 157 pages. EDRS price microfiche 65c, hardcopy $6.58.

A workshop on Adult Basic Education (ABE), held at Ohio State University, was organized around the team approach in developing a model learning center, field experiences in the Columbus area, and speeches by special consultants. This document presents these speeches—on such topics as adult learning, psychological characteristics of ABE participants, reading instruction, teaching English as a second language, instructional materials, the role of the teacher, learning centers in the large city, reading and language, and evaluation. The appendix includes a report of the development of an ABE learning center, a bibliography, and a roster of participants.

How to Make Successful Use of the Learning Laboratory.

John M. Peters and Curtis Ulmer, editors. Prentice Hall, Englewood Cliffs, New Jersey, 1972, 60 pages.

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